

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/812,770
Applicant : Kazuhiko Matsumoto
Filed : March 30, 2004
Title : “MULTISYSTEMATIC VOLUME RENDERING IMAGE
PROCESSING SYSTEM”

TC/A.U. : 2628
Examiner : Daniel F. Hajnik
Conf. No. : 4956

Cust. No. : 000,116
Docket No. : NGB1-36609

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicant requests a pre-appeal brief conference for review of the final rejection in the above-identified application. No amendments are being filed with this request. The final rejection is set forth in the Office action of July 2, 2007. The three-month period for responding to the Office action expired on October 2, 2007. A Notice of Appeal and a Petition for an Extension of Time 37 CFR 1.136(a) accompany this pre-appeal brief request for review.

Remarks/Arguments begin on page 2.

REMARKS/ARGUMENTS

The following remarks and arguments are provided in support of this pre-appeal brief request for review, and supplement the arguments provided in Response “D” (submitted April 13, 2007) and Response “E” (submitted September 24, 2007).

Claims 2-4 and 6 were rejected as being unpatentable over Wolff (US 6,067,545) in view of Iyriboz (6,369,812). Claim 2 recites:

“volume data from the volume data storage unit is transmitted to the destination image data server computer and additional information including scale-up factor data, angle data, and position data of the image requests is copied from the operative image data server computer to the destination image data server computer, and the destination image data server computer is made to execute the data processing.”

The subject matter of claim 2 is a distributed image processing system that provides for the independent transferring of volume data, which is large in size, and “additional information” including scale-up factor data, angle data, and position data (i.e., rendering parameters), which is small in size. Volume data is transferred from the volume data storage unit to the destination server computer. Volume data does not need to be transferred from the operative image data server computer to the destination server computer, which would appreciably slow current image processing by the operative image data server computer, due to the considerable size of the volume data. However, additional information including scale-up factor data, angle data, and position data are transferred from the operative image data server computer to the destination server computer. Because the “additional information” that is transferred between the image data server computers is small in size, especially when compared to the volume data, current

image processing by the operative image data server computer is not appreciably slowed by the data transfer.

Applicant submits that the combination of Wolff and Iyriboz fails to teach, or otherwise render foreseeable, copying “additional information including scale-up factor data, angle data, and position data of the image requests” from an operative image data server computer to a destination image data server computer. As discussed in applicant’s Response “D”, Iyriboz fails to teach copying “additional information including scale-up factor data, angle data, and position data of the image requests” from an operative image data server computer to a destination image data server computer. The outstanding Office action (see pages 4-5) cites Iyriboz at 13:36-39 and 48-49 for teaching “additional information including scale-up factor data, angle data, and position data,” and Iyriboz at 5:43-47 for teaching “of the image requests is copied from the operative image data server computer to the destination image data server computer, and the destination image data server computer is made to execute the data processing.” Assuming, *arguendo*, that Iyriboz teaches “additional information including scale-up factor data, angle data, and position data” at 13:36-39 and 48-49, Iyriboz does not teach that said additional information is copied from an operative image data server computer to a destination image data server computer. Iyriboz’s remote operator control 350 and virtual reality viewing application 362 are part of a remote computer 34, which downloads compressed images of “the sequence” (i.e., a sequence of sphere-mappable panoramic views of selected portions of the CT data along a viewpath) from a server 26. See Fig. 1, Fig. 2C and 13:10-14. The remote operator control 350 and virtual reality viewing application 362 enable a remote viewer to rotate pitch and yaw to selectively view any portion of the spherical image (13:36-38). The remote operator control 350 and virtual reality viewing application 362 also permit the remote viewer to move along the view

path, via a path motion processor 394 (13:40-49). *The remote operator control 350, virtual reality viewing application 362 and path motion processor 394 are all part of the remote computer 34.* No “additional information including scale-up factor data, angle data, and position data” is copied from the remote computer 34 to a destination image data server computer. Iyriboz merely teaches that compressed images of “the sequence” are downloaded by the remote computer 34. Iyriboz does not teach or suggest that data with respect to pitch, yaw or movement along the view path entered through the remote operator control 350 are transmitted anywhere or are used anywhere other than locally at the remote computer 34. Therefore, the teachings cited by the Office action at pages 4-5 do not teach that additional information including scale-up factor data, angle data, and position data of the image requests, is copied from the operative image data server computer to the destination image data server computer.

The Office action at page 8 further attempts to explain how such limitations could be taught by the combination of Wolff and Iyriboz, and asserts that the “additional information” can be part of a client I/O request of Wolff (see Figs. 7A and 7B) that includes a position and view orientation control from Iyriboz. Wolff teaches that a node 4 server sends a redirect packet 700 to the aware client 3 (see Fig. 7A), and the aware client 3 *redirects* I/Os along path 704 through a node 3 server (24:51-25:11). Assuming, *arguendo*, that Wolff’s client I/O request can include “additional information,” such information is not copied from an operative server to a destination server, but *from the aware client 3 to a server*. The aware client 3 initially sends I/O requests to the node 4 server, which becomes overloaded. The node 4 server commands the aware client 3 to redirect I/O requests to another server, and the aware client complies and sends I/O request to the node 3 server. Clearly, if the I/O requests included the claimed “additional information,” such information would not be copied from the node 4 server to the node 3 server. It would be

initially sent from the aware client 3 to the node 4 server, then, upon redirect, from the aware client 3 to the node 3 server. Applicant submits that the cited combination of references fails to teach or otherwise render foreseeable copying “additional information including scale-up factor data, angle data, and position data of the image requests” from an operative image data server computer to a destination image data server computer, and that claim 2 is allowable over the cited combination.

Claims 3, 4 and 6 depend from claim 2 and are allowable over the combination of Wolff and Iyriboz for the reasons discussed above.

In view of the arguments provided above, applicant respectfully requests reconsideration and withdrawal of the rejections of claims 2-4 and 6. It is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. NGB1-36609.

Respectfully submitted,

PEARNE & GORDON LLP

By: Brad C. Spencer
Brad C. Spencer, Reg. No. 57076

1801 East 9th Street
Suite 1200
Cleveland, Ohio 44114-3108
(216) 579-1700

Date: November 2, 2007